

ICE CLEAR EUROPE LIMITED: CDS ADDENDUM TO THE DCO APPLICATION

A. Introduction

At the time of the Application, the Clearing House's clearing services were limited to the energy and related contracts referred to therein. However, the Clearing House is in the process of developing a clearing service for the clearing of certain CDS ("CDS"). The Clearing House does not currently offer a clearing service for CDS, but anticipates launching this service in July 2009. We have therefore set out below an addendum to the Clearing House's application which provides a summary description of the Clearing House's clearing services in respect of CDS. This addendum is intended to set out differences between the Clearing House's proposed clearing services in respect of CDS contracts and the current clearing services in respect of energy and energy-related contracts, and includes:

- Membership Criteria;¹
- Clearing and settlement for CDS contracts;²
- Risk management;³ and
- IT.⁴

Payments will be effected in substantially the same way as for the energy clearing service outlined in the DCO Application, and therefore this addendum refers only to CDS Contract coupon payments.

B. Executive Summary

This addendum sets out information which relates to the Clearing House's development of its clearing services to extend to the clearing of Index and Individual name credit default swaps ("CDS"). In summary:

- The CDS clearing service will operate as a "clearing house within a clearing house", with two separate risk pools: energy; and CDS.
- The Rules and Procedures are being amended to establish separate CDS guaranty fund and margining arrangements.
- The Clearing House governance arrangements⁵ are being updated to:
 - include up to two additional non-executive directors with CDS experience; and
 - Create a second Risk Committee specifically for CDS.

¹ Core Principle C.

² Core Principle E

³ Core Principle D

⁴ Core Principle K.

⁵ Core Principle B.

Should a DCO recognition order be granted the Clearing House does not intend to operate a CDS clearing service under its DCO authorization.

C. CDS Clearing Service:

1. CDS CLEARING MEMBERSHIP CRITERIA

- 1.1 An applicant for membership of the Clearing House must meet certain membership criteria at the time of its application and at all times thereafter and must comply with various ongoing obligations.
- 1.2 The criteria for participation in CDS clearing are set out in the Rules and Procedures. In particular, additional CDS clearing membership criteria can be summarised as:
 - (a) a minimum of \$5 billion of Capital, provided that this requirement may, at the discretion of the Clearing House, be met by a direct or indirect parent (“Parent”) that is acceptable to the Clearing House and the Parent provides a guarantee;
 - (b) a minimum long-term senior unsecured debt rating at admission of: (A) “A2” from Moody’s Investors Service (“Moody’s”), (B) “A” from Standard & Poor’s Ratings Services (“S&P”), or (C) “A” from Fitch Ratings (“Fitch”); it has a long-term senior unsecured debt rating of: (A) “Baa2” from Moody’s, (B) “BBB” from S&P, (C) “BBB” from Fitch or at admission or thereafter the equivalent rating from any other rating agency that the Clearing House designates from time to time for this purpose; and in all cases provided that, if such applicant does not have such a rating from any of these rating agencies specified above, it demonstrates to the Clearing House that it otherwise satisfies stringent credit criteria, as confirmed by an examination of its books and records; and in all cases provided further that this requirement may, at the discretion of the Clearing House, be met by a Parent if such Parent provides a guarantee.
 - (c) it demonstrates operational competence in CDS contracts;
 - (d) it is a member of industry organisations related to CDS;
 - (e) it has executed a Schedule to the ISDA Master Agreement with the Clearing House and relevant supplements; and
 - (f) if it is not incorporated in England and Wales, it has appointed a service of process agent.

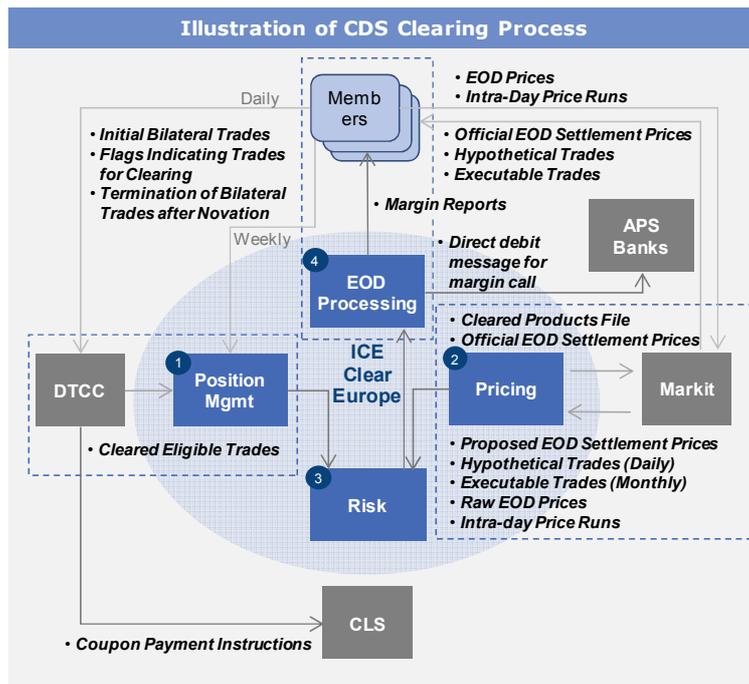
2. CLEARING AND SETTLEMENT

Rules and Practices

- 2.1 The Clearing House Rules and Procedures will contain the Clearing House’s practices in relation to the clearing and settlement of CDS.

Overview of the Clearing Process

- 2.2 The Clearing House CDS clearing process will be:



- ### Key Process Steps
- 1 Position Management**
 - Receive position file from DTCC
 - Identify eligible trades based on Clearing Member flags
 - Create bilateral trades between ICE Clear Europe and Clearing Members (Members)
 - 2 Pricing**
 - Provide Markit with file detailing cleared products with open interest by Member
 - Receive proposed settlement prices, matched interest trades, and raw EOD price quotes from Markit
 - Receive Member's intraday price runs
 - Provide Markit with official EOD Settlement Prices
 - 3 Risk**
 - Receive price and position information
 - Calculate daily Mark-to-Market margin
 - Calculate Initial Margin
 - Calculate Guaranty Fund and allocations
 - Provide inputs for end of day processing
 - 4 End of Day Processing**
 - Send daily Mark-to-Market margin and Initial Margin reports to Members
 - Provide direct debit instructions for daily margin calls

Matching and Clearing Transactions

2.3 Once a matched CDS contract has been forwarded to, or obtained by, the Clearing House, and has been accepted for clearing by it, the Clearing House will clear the CDS contract by becoming the central counterparty to each party to the trade. Deriv/SERV's current infrastructure will help to ensure that the Clearing House maintains a matched book of offsetting CDS contracts. Maintaining a matched offsetting book is essential to managing the credit risk associated with CDS contracts submitted to the Clearing House for clearing.

The Clearing Process

- 2.4 Each bilateral CDS contract between two Clearing Members that is submitted, and accepted by the Clearing House, for clearing will result in a CDS contract arising as between the Clearing House and each Clearing Member. As part of this process, each bilateral CDS contract submitted to the Clearing House will be replaced by two superseding CDS contracts between each of the original parties to the submitted transaction and the Clearing House on standard terms mandated by the Clearing House. Under these new contracts, the Clearing House will act as protection buyer to the original protection seller and as protection seller to the original protection buyer. As central counterparty to each novated CDS contract, the Clearing House will be able to net offsetting positions on a multilateral basis, even though the Clearing House will have different counterparties with respect to the novated CDS contracts that are being netted.
- 2.5 As part of the contractual acceptance process, the terms and conditions governing the CDS bilaterally negotiated by the submitting counterparties will be superseded by the relevant provisions of the Clearing House Rules, the ISDA 2002 Master Agreement and appropriate Schedules to the 2002 ISDA Master Agreement entered into by the Clearing House and each Member. This step is necessary in order to eliminate any documentation basis risk, and consequent financial risk, to the Clearing House (and, indirectly, to Members) that could arise if, as a result of multilateral netting, the documentation terms governing opposite sides of offsetting CDS positions to which the Clearing House is central counterparty are not consistent.

Operation of the settlement arrangements

- 2.6 There are 2 broad types of settlements for a CDS Clearing House –
- (a) Settlement of margin calls (done in cash or collateral); and
 - (b) Settlement of coupon payments.

Settlement of Margin Calls

- 2.7 The Clearing House will collect margin in the same way as it currently uses for its energy clearing through its existing APS (Assured Payment System) structure, described in the DCO Application.

Cash Settlement of Coupon Payments and Credit Events

- 2.8 The Clearing House facilitates payment of quarterly coupons and credit event settlements through DTCC central settlement.

3. RISK MANAGEMENT

Roles and Responsibilities

- 3.1 The Clearing House's risk management department will be responsible for the risk management of the CDS clearing service.

Identifying, measuring and controlling different types of risks

- 3.2 The Clearing House will start the European CDS clearing business by providing clearing for the European CDS indices (iTraxx).

3.3 The Clearing House’s approach to managing systemic risk will be based on a six-tiered waterfall - beginning with membership criteria and concluding with two stages of risk mutualisation - the Guaranty Fund and powers of assessment. The strength of the approach is that each tier builds on the other tiers, and all tiers apply to all Clearing Members without exception. The tiers are (in order):

Waterfall Approach



3.4 This approach provides robust systemic risk mitigation in a construct that:

- Respects the opportunity cost of posting collateral
- Avoids irrational charges that would disincentivise clearing of bilateral trades
- Creates a zero-rated entity for credit risk under Basel II guidelines
- Follows Bank of International Settlement (“**BIS**”) and Basel Recommendations for Clearing and Credit Risk Transfer

Counterparty Risk

3.5 Clearing House’s risk management infrastructure is structured specifically for the CDS sector. By standardising the CDS contracts accepted for clearing, it is able to net the transactions, thereby reducing the volume of open transactions and ultimately the amounts owed to and due from its counterparties. Counterparty Risk is managed by the Clearing House’s six-tiered waterfall approach set out above.

Instrument Risk

3.6 Instrument Risk is quantified as the largest potential loss related to a maximum (high volatility) up- and/or down-moves of the credit spread over a 5-day time horizon. The Clearing House has developed a risk methodology to manage this risk.

Concentration Charges

- 3.7 Explicit concentration charges are applied to indices or sub-indices whose losses exceed a threshold of position size relative to the market depth. The Clearing House's concentration charge is designed to increase a Clearing Member's margin requirement toward the risk of loss. The concentration-based margin requirements increase as the Clearing House determines that additional time would be required to liquidate an increasingly large position in the event of a default.

Guaranty Fund

- 3.8 The Clearing House is establishing a separate CDS Guaranty Fund. The size of the Guaranty Fund will be set at the maximum stress loss of: (i) uncollateralized losses of the largest defaulting Clearing Member with a long protection profile and (ii) the uncollateralized losses of the two largest defaulting Clearing Members which exhibit short protection profiles.

Risk Limits and Controls

- 3.9 In addition to the Waterfall mechanism, the Clearing House also accounts for position concentration risk and highlights Clearing Members that require close monitoring.

Risk Reporting and Monitoring of Risk

- 3.10 The Risk Management System produces a range of daily and monthly reports for the Clearing Members.

Stress Testing of Risk Management Methodology

- 3.11 The models that calculate Initial and Mark-to-Market Margin and Guaranty Fund requirements will be subject to regular testing including both back testing and stress testing.

4. INFORMATION TECHNOLOGY SYSTEMS

Operation of clearing arrangements for CDS: IT Systems

- 4.1 The Clearing House's operations will rely on three key systems environments; Trade Management System, Clearing Engine and Risk Management to support the Trade, Clearing and Risk Management activities respectively.

Trade Management System

- 4.2 Trade Management: Covers the range of functions whereby Clearing Members, trading venues, and the Clearing House communicate the execution and the terms of a trade execution to one another. Trade management functions capture new and amended transactions, validate the data contents, enrich/transform data, commit data to permanent data stores, and route trade data as well as notification messages to the other relevant third parties.
- 4.3 Post-Trade Transaction Management: Supports all administrative actions a Clearing Member can do after a trade has been executed. This could cover a range of transactions and user actions which include: give-up processing, position transfer, price averaging, clearing /non-clearing designation, option exercise, account designation changes/allocations, physical delivery notification.

Clearing Management System

- 4.4 The Clearing Management System supports four key business functionality components:
- (a) **Position Keeping:** Position keeping refers to the functions tied to the accounting of cash and security positions. This includes netting, off-setting, close-out methodology, sub-account allocation, and all forms of summary and detailed position reporting.
 - (b) **Management of Position Impacting Events:** This category addresses the tracking and processing of non-trade business events that impact positions held at the Clearing House. Such business events include credit or succession events for CDS, physical deliveries of futures/forwards, and corporate actions for options.
 - (c) **Settlement of Current Obligations:** Settlement refers to the computation, monetization, bank transaction management, and communication of current and/or historic price risk obligations. Settlements could take the form of futures mark-to-market, swap periodic payments, CDS coupon (via CLS), or CDS replacement value margin cash flows.
 - (d) **Fee Management:** Includes Clearing House computed fees amongst Clearing Members, between the Clearing House and the Clearing Members and between Clearing Members and trading venues. Examples include give-up commissions, brokerage fees, clearing fees, and exchange fees.

Risk Management System

- 4.5 The Risk Management System supports three key business functionality components:
- (a) **Risk Based Margining:** This set of functions allows the Clearing House to compute and track Clearing Member obligations which are designed to cover the future price risk of a cleared position. Risk based margin is driven by product: the future price risk is forecast based on various product-specific models.
 - (b) **Guaranty Fund Management:** Relates to the Clearing Member and Clearing House management of collateral and other forms of guaranty fund deposit. Deposit and withdrawal transactions, guarantee fund deposit management and monitoring risk are all functional examples of guaranty fund management.
 - (c) **Credit Verification and Monitoring:** This set of functions covers the tracking, reporting, and active/passive monitoring of positions against assets on account with the Clearing House. This includes pre-execution credit checking and real-time gain/loss monitoring against capital and collateral on-hand.